



Proposed Revisions to the Investment Policy Statement and Investment Objectives and Guidelines

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Investment Policy Statement

- Exhibit B - Asset Allocation amended for new asset allocation
 - Objectives adjusted
 - New asset classes added
 - U.S. Long Treasuries
 - Risk Parity Exposure
 - Master Limited Partnership (MLP) Exposure



Investment Policy Statement

- Exhibit B - Asset Allocation amended for new asset allocation (cont.)
 - Financing represents synthetic exposures to meet asset class objectives within the policy ranges
 - Staff will target the most efficient sources based on cost, liquidity, and other concerns
 - Synthetic exposure can be used on any asset class
 - Maximum amount of leverage/financing: 18%



Investment Policy Statement

- Exhibit C – Policy Index amended for new asset allocation
 - New benchmarks for new asset classes
 - Barclays Capital U.S. Treasury Long Index
 - S&P MLP Index
 - Custom benchmark for Risk Parity
 - 3-Month LIBOR for Financing



Investment Policy Statement

- Exhibit D – Target Ranges Amended
 - Added ranges for the 3 new asset classes



Investment Objectives and Guidelines

- Addendum I-1 – Internally Managed U.S. Long Treasuries Fixed Income Portfolios
 - New guideline
 - Account will be notionally funded
 - Some capital will be funded to the account to meet initial margin and variation margin
 - Portfolio will be managed by the Fixed Income Group
 - Portfolio will consist exclusively of U.S. cash equivalents; Treasury bills, notes, and bonds; U.S. Treasury Futures; or Options on U.S. Treasury Futures

**PENNSYLVANIA PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM
INVESTMENT OBJECTIVES AND GUIDELINES
INTERNALLY MANAGED U.S. LONG TREASURIES FIXED INCOME PORTFOLIO**

ADDENDUM I-1

I. OBJECTIVES

This actively managed minimally funded U.S. fixed income portfolio will consist of U.S. cash equivalents; Treasury bills, notes, and bonds; U.S. Treasury Futures; or, Options on U.S. Treasury Futures.

The objectives of this portfolio are to generate exposure to the Barclays Capital U.S. Treasury Long Index. The Board will provide the manager with a notional value, in writing, prior to the funding of the portfolio. The Board will provide the manager with any changes in the notional value of the portfolio, in writing, at least two (2) business days prior to the effective date of the change, but it will otherwise remain constant. The portfolio will only be implemented over the notional value and not over any realized or unrealized gains or losses of the portfolio.

II. PORTFOLIO RISK MANAGEMENT

The Board's expectations are that this portfolio be actively managed within the spirit of a U.S. Long Treasuries Fixed Income mandate. Within this framework, the following are the portfolio risk constraints under which the manager is required to operate:

A. Interest Rate Risk

The effective or Option-adjusted duration of the portfolio must range from plus to minus 2.0 years relative to the Index based on the notional value.

B. Spread Risk

No spread risk is permissible. Only U.S. cash equivalents, Treasury bills, notes and bonds and U.S. Treasury Futures or Options on U.S. Treasury Futures are permissible.

C. Credit Risk

No credit risk is permissible. Only U.S. cash equivalents, Treasury bills, notes and bonds and U.S. Treasury Futures or Options on U.S. Treasury Futures are permissible.

D. Currency Risk

No currency risk is permissible. Only U.S. cash equivalents, Treasury bills, notes and bonds and U.S. Treasury Futures or Options on U.S. Treasury Futures are permissible.

E. Sovereign Risk

No securities or bonds from non-U.S. countries are permitted. Only U.S. cash equivalents, Treasury bills, notes and bonds and U.S. Treasury Futures or Options on U.S. Treasury Futures are permissible.

F. Concentration Risk

Only U.S. cash equivalents, Treasury bills, notes and bonds and U.S. Treasury Futures or Options on U.S. Treasury Futures are permissible; therefore, concentration risk is not consider an issue since all of the instruments are either fully guaranteed by the U.S. Government or by the members of the clearinghouse where the U.S. Treasury Futures or Options on U.S. Treasury Futures were traded.

G. Absolute Restrictions

U.S. cash equivalents, Treasury bills, notes and bonds and U.S. Treasury Futures or Options on U.S. Treasury Futures are permissible investments; otherwise, any other investments are strictly prohibited without the written permission of the CIO.

H. Derivative Counterparty Risk

The commercial and investment banks used for approved OTC futures, approved OTC Options, or forward/spot currency transactions must be rated A3 or better by Moody's Counterparty Ratings, (if not rated by Moody's, then rated A- or better by Standard and Poor's Counterparty Ratings or rated B or better by Fitch's Bank Individual Ratings).

I. Liquidity Risk

Only U.S. cash equivalents, Treasury bills, notes and bonds and U.S. Treasury Futures or Options on U.S. Treasury Futures are permissible therefore liquidity is not a risk.

III. DERIVATIVES

The portfolio is permitted to establish and maintain long positions in:

- a. Listed Options on U.S. Treasury Futures Contracts; and
- b. Listed U.S. Treasury Futures Contracts.

Fixed income derivatives may only be used to manage interest rate risk.

IV. AMENDMENTS

A written request to the Chief Investment Officer (CIO) and Deputy CIO (DCIO) should be made if the manager believes that these portfolio risk constraints significantly limit the ability of the manager to achieve the objectives of the portfolio. A written amendment will be issued from the CIO, or the DCIO in the CIO's absence, if the request is approved.

Proposed March 8, 2012

Exhibit B – Asset Allocation

The current long-term, top-down Asset Allocation targets of the Board, based on the market value of the System's assets as of October 1, 2011~~July 1, 2012~~, subject to the provisions discussed below:

<u>ASSET CLASS</u>	<u>SUB-CLASS OBJECTIVE</u>	<u>OBJECTIVE</u>	<u>POLICY RANGE</u>
Equity Exposure			
Public Markets Global Equity Exposure		2617.00%	± 10.0%
Private Markets		21.00%	
Private Real Estate		9.7512.00%	
Total Equity Exposure		55.7550.00%	± 10.0%
Fixed Income Exposure			
U.S. Global Fixed Income	5.258.00%		± 4.0%
U.S. Long Treasuries	3.00%		± 3.0%
Non-U.S. Developed Markets Fixed Income	3.00%		± 3.0%
TIPS	512.00%		± 46.0%
High Yield	68.00%		± 4.0%
Emerging Markets Fixed Income	2.00%		± 2.0%
Cash	53.00%		± 53.0%
Total Fixed Income Exposure		26.2534.00%	± 10.0%
Absolute Return Exposure		12.00%	± 4.0%
Risk Parity Exposure		5.00%	± 5.0%
Master Limited Partnership Exposure		2.00%	± 2.0%
Commodity Exposure		6.00%	± 4.0%
Financing¹		(9.00%)	± 9.0%
		100.00%	

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As the Private Real Estate and Private Markets allocations are funded (or distributions received) and/or the allocation increases/decreases due to the total market value of the Fund changing, the Public Markets Global Equity objectives will be revised to reflect these changes. For example, if the allocation to Private Markets increases by 100 basis points due to a change in the market value of the total Fund in the fourth quarter, then starting with the first quarter the objective in Private Markets will increase by 100 basis points and the objective in Public Markets Global Equity exposure will each be reduced by 100 basis points with proportional adjustments to the sub-class objectives. Adjustments to the Private Real Estate and Private Markets objectives will be completed in 50 basis point increments (adjustment will be made to the nearest 0.50%) on a quarterly basis. The ultimate objective of these adjustments is to maintain the total equity exposure around the long-term targets.

The policy ranges for the Asset Allocation represent rebalancing triggers and tactical allocation constraints around the objectives.

For purposes of this analysis, cash and cash equivalents held in each Investment Manager's portfolio will be considered fully invested based on that advisor's objectives (i.e. cash in an equity Investment Manager's account will be considered as part of the Public Markets Global Equity in the table above). For classification purposes, cash equivalents include fixed income securities maturing in less than one year.

¹ Financing represents the amount of leverage embedded in the asset allocation. Financing may be used on any of the public market equity, fixed income, or commodity asset classes within the Board approved policy ranges.

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Exhibit C – Policy Index

Based on the Asset Allocation in **Exhibit B**, the Board adopts the following weighted policy benchmarks to measure the performance of the System beginning ~~October 1, 2011~~ July 1, 2012, subject to footnote 1:

Public Markets Global Equity Exposure	
MSCI ACW IMI with USA (gross) Index	2517.00% ¹
U.S. Global Fixed Income	
Barclays Capital U.S. Aggregate Index	5.255.00%
Barclays Capital Global Aggregate GDP-weighted Developed Market ex-U.S. (Unhedged) Index	1.00%
Barclays Capital EM Local Currency – Government – MV Weighted (Unhedged) – 10% Country Cap Index	2.00%
Non-U.S. Developed Markets Fixed Income	
Barclays Capital Global Aggregate GDP-weighted Developed Market ex U.S. (Unhedged) Index	3.00%
U.S. Long Treasuries	
Barclays Capital U.S. Treasury Long Index	3.00%
High Yield	
Barclays Capital U.S. High Yield Index	68.00%
TIPS	
Barclays Capital U.S. TIPS Index (Series-L)	512.00%
Emerging Markets Fixed Income	
Barclays Capital EM Local Currency – Government – MV Weighted (Unhedged) – 10% Country Cap Index	2.00%
Cash	
Merrill Lynch U.S. Treasury Bill 0 – 3 Months	53.00%
Private Real Estate	
NTFI, allocation weighted, one-quarter lagged ²	9.7512.00% ¹
Private Markets	
Venture Economics Median, one-quarter lagged ³	21.00% ¹
Absolute Return	
7.5% Annualized Return	12.00%
Risk Parity	
Custom Benchmark ⁴	5.00%
Master Limited Partnerships	
S&P MLP Index	2.00%
Commodities	
DJ/UBS Commodity Index	6.00%
Financing Cost of Leverage	
3-Month LIBOR	(9.00%)

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Total **100.00%**

¹ As the Private Real Estate and Private Markets allocations are funded (or distributions received) and/or the allocation increases/decreases due to the total market value of the Fund changing, the Public Markets Global Equity benchmark will be revised to reflect these changes. For example, if the allocation to Private Markets increases by 100 basis points due to a change in the market value of the total Fund in the fourth quarter, then starting with the first quarter the Policy Index will include this 100 basis points increase in the Private Markets benchmark and the Public Markets Global Equity exposure will also be reduced by 100 basis points. Adjustments

to the Private Real Estate and Private Markets benchmarks will be completed in 50 basis point increments (adjustment will be made to the nearest 0.50%) on a quarterly basis.

² PSERS weights each of the net, value-weighted NTFI sub-indices (Open-End Diversified Core Equity (ODCE), Closed-End Value-Added, and All Opportunistic) against the actual net asset values of the System's private real estate investments quarterly to produce a customized, blended benchmark return. This provides a single Private Real Estate policy benchmark return for the System.

³ The Venture Economics Median returns will be calculated on a weighted vintage year basis that will account for the timing of commitments made by the System.

⁴ Custom benchmark is structure as follows: MSCI EAFE Index Hedged (15% weight); DJ/UBS Commodity Index (10%); S&P GSCI Precious Metals Index (5%); Barclays Capital World Inflation Linked Bond Index Hedged (10%); MSCI Emerging Markets Large Index \$ Net (10%); S&P 500 Index (15%); and Barclays Capital Global Aggregate Hedged Index (35%).

Exhibit D – Public Market Investment Manager Target Ranges

All allocations to individual Investment Manager portfolios shall be subject to the limits established by the Board through the Asset Allocation in Exhibit B. IOS is permitted to manage the allocation of capital to each Investment Manager portfolio within the target ranges to public market Investment Manager portfolios of the total fund noted below. The CIO shall have discretion on the timing of reducing any Investment Manager portfolio exceeding the maximum ranges approved below. However, the CIO is not permitted to allocate additional capital to those portfolios currently above the target ranges.

	<u>Target Ranges as a Percentage of the Total Fund</u>
Public Markets U.S. Equity Portfolios	
Internally Managed S&P 500 Index	0.0% - 20.0%
Internally Managed S&P 400 Index	0.0% - 2.5%
Internally Managed S&P 600 Index	0.0% - 2.5%
U.S. Style-Oriented Small Cap Equity	0.0% - 1.0%
U.S. Micro Cap Equity	0.0% - 0.5%
Internally Managed Synthetic Beta Replication ²	0.0% - 5.0%
Public Markets Non-U.S. Equity Portfolios	
Internally Managed MSCI ACW Index ex. U.S.	0.0% - 15.0%
Internally Managed MSCI World Small Cap Index ex. U.S.	0.0% - 2.5%
Internally Managed MSCI Emerging Markets Index	0.0% - 2.5%
Non-U.S. Equity	0.0% - 2.5%
Non-U.S. Small Cap Equity	0.0% - 1.0%
Emerging Markets Equity	0.0% - 1.0%
Internally Managed Synthetic Beta Replication ²	0.0% - 5.0%
Global Fixed Income and High Yield Portfolios	
Internally Managed U.S. Core Fixed Income	0.0% - 5.0%
U.S. Core Plus or Non-U.S. Developed Fixed Income	0.0% - 2.0%
Emerging Market Fixed Income	0.0% - 1.5%
U.S. High Yield Fixed Income	0.0% - 2.0%
Multi-Sector Fixed Income	0.0% - 3.0%
Internally Managed Synthetic Beta Replication ²	0.0% - 5.0%
<u>U.S. Long Treasury Portfolio</u>	
Internally Managed U.S. Long Treasuries	0.0% - 1.0% ³
TIPS Portfolios¹	
Internally Managed U.S. TIPS	0.0% - 5.0%
U.S. and Non-U.S. TIPS	0.0% - 2.54.0%
Internally Managed Synthetic Beta Replication ²	0.0% - 2.0%

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¹ The total TIPS portfolios may be leveraged up to 3.3 times in aggregate.

² The maximum amount of internally managed synthetic beta replication will be 99% of the total fund (excludes beta synthetically replicated within the actively managed and indexed Separate Account portfolio).

³ The U.S. Long Treasury Portfolio will be notionally funded subject to a maximum notional value of 6% of the total market value of the fund. The capital allocated to this portfolio will be for margin requirements and to settle margin variation.

	Target Ranges as a percentage of the Total Fund
Cash Portfolios	
Internally Managed LIBOR-Plus Short-Term Investment Pool	0.0% - 8.0%
Externally Managed LIBOR-Plus Short-Term Investment Pool	0.0% - 5.0%
Externally Managed Short Duration Non-Agency RMBS Portfolios	0.0% - 1.0%
Internally Managed Short-Term Investment Pool	No limit
PTRES Portfolios	
U.S., Non-U.S., and Global PTRES	0.0% - 1.0%
Internally Managed Synthetic Beta Replication ²	0.0% - 2.0%
Absolute Return Portfolios	
Active Currency	0.0% - 0.5% ⁴
Global Macro	0.0% - 2.0%
All Other Absolute Return Portfolios Strategies (including Absolute Return Emerging Markets Fixed Income)	0.0% - 2.0%
Risk Parity Portfolios	
Externally Managed Risk Parity Portfolios	0.0% - 2.5%
Internally Managed Risk Parity Portfolio	0.0% - 1.0%
Master Limited Partnership Portfolios	
Externally Managed Enhanced and Full Discretion	0.0% - 1.0%
Commodities Portfolios	
Externally Managed Full Discretion and Enhanced Index Commodity	0.0% - 2.0%
Internally Managed Enhanced Commodities Index Portfolio	0.0% - 2.0%
Internally Managed Synthetic Beta Replication ²	0.0% - 2.0%
PMEIM Program Portfolios	0.0% - 0.3%

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Internally Managed Synthetic Beta Replication represents market exposures in the various asset classes achieved through Derivative exposures such as futures, options, swaps, etc. IOS will synthetically achieve beta exposures to either assist in a transition from one actively managed portfolio to another or to generate alpha. It excludes synthetic beta replication within the actively managed and indexed Separate Account portfolios.

² The maximum amount of internally managed synthetic beta replication will be 5% of the total fund (excludes beta synthetically replicated within the actively managed and indexed Separate Account portfolio).

⁴ Currency portfolios without capital requirements will be subject to a maximum of \$250 million notional at 16.0% tracking error.